

Launch Mission Execution Forecast

Mission: Falcon 9 Starlink-L20

Issued: 5 March 2021 / 0800L (1300Z)

Valid: 8 March 2021 / 2120-2321L (9/0220–0421Z)



Forecast Discussion: Expect spectacular weather across Central Florida today with partly cloudy skies, northeast winds, and temperatures reaching into the mid-70s. Elsewhere, a low pressure area is organizing in the Gulf of Mexico which will increase cloud cover overnight. On Saturday, this system will bring widespread clouds, showers and isolated thunderstorms, as well as gusty winds through the day as it transits South Florida. The system will continue to move east into the Atlantic on Sunday, taking much of the unsettled weather with it, as high pressure builds into Florida. The pressure gradient between these two systems will keep gusty northerly winds over the Space Coast throughout the day. On Monday, winds will diminish and become more northeasterly as the high pressure area moves off the Mid-Atlantic coast. The primary weather concern for an attempt Monday evening is liftoff winds from this pressure gradient. Expect much the same conditions on Tuesday as the winds become easterly, increasing cloud cover slightly. This

Expect much the same conditions on Tuesday as the winds become easterly, increasing cloud cover slightly. This will add a slight threat for a Cumulus Cloud Rule violation to the liftoff winds as primary concerns for an attempt Tuesday.

| | Probability of Violating Weather Constraints | | | | | | | | | | |
|---------|---|--------------------------------|---|--------------------------------------|-----------------------------------|--|--|----------------------------------|---|---------------------------|--|
| Day | 20% Primary Concerns: Liftoff Winds | | | | | | | | | | |
| ch | Weather Conditions | | | | | | | | Additional Risk Criteria | | |
| aunch | Weather/Visibility: | | None / 7 mi. | | Clouds Type Coverage Base (ft) To | | | Tops (ft) | Upper-Level Wind Shear: | Low | |
| Ľ | Temp/Humidity: | | 62°F / 72% | | Cumulus | Few | 3,500 | 5,000 | Booster Recovery Weather: | Low | |
| | Liftoff Winds | (200'): | 060° 17 - 2 | 22 mph | Cirrostratus | Few | 28,000 | 30,000 | Solar Activity: | Low | |
| | Probability of Violating Weather Constraints | | | | | | | | | | |
| Delay | 20% Primary Concerns: Liftoff Winds, Cumulus Cloud Rule | | | | | | | | | | |
| | | | , | | | | | | | | |
| | | | | Weather | Conditions | S | | | Additional Risk Cr | iteria | |
| | Weather/Visi | bility: | None / 7 m | | Conditions | Clouds Coverage | Base (ft) | Tops (ft) | Additional Risk Cri | iteria | |
| 24-Hour | Weather/Visi | • | • | ni. | | Clouds | - | Tops (ft) 5,000 | | | |
| | | ity: | None / 7 m 64°F / 80% | ni. 6 | Туре | Clouds Coverage | Base (ft) | , | Upper-Level Wind Shear: | Low | |
| Note: | Temp/Humid Liftoff Winds | ity: (200'): of Violatio | None / 7 m 64°F / 80% 090° 17 - 2 | ni. 6 22 mph ne chance thai | Type Cumulus Altocumulus | Clouds Coverage Few Scattered ch Commit Crit | Base (ft) 3,500 12,000 teria (LLCC) | 5,000 14,000 or certain us | Upper-Level Wind Shear: Booster Recovery Weather: | Low Low Low pitation, and | |